ACC NR: AP7001339 SOURCE CODE: UR/0386/66/004/011/0449/0453

AUTHOR: Kurnosov, V. D.; Magalyas, V. I.; Pleshkov, A. A.; Rivlin, L. A.; Trukhan, V. G.; Tsvetkov, V. V.

ORG: none

TITLE: Self modulation of emission from an injection semiconductor laser

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 11, 1966, 449-453

TOPIC TAGS: semiconductor laser, laser emission, laser pumping, light modulation, pn junction, gallium arsenide

ABSTRACT: The authors show first, by analyzing the kinetic equations for the power of an injection-type laser, that self modulation of such a laser is possible if it is assumed that the injection laser has the same self-oscillating properties as an optically pumped one. They then report on the time structure of a GaAs laser emission, observed experimentally by means of an electron-optical converter (EOC) (M. M. Bustlov, Uspekhi nauchnoi fotografii no. 6, 76, 1959) with a time-scanned image (sweep duration ~2 nsec). The GaAs diode with a p-n junction produced by diffusion was excited by single injection-current pulses of 1 - 5 amp and 600 nsec duration, synchronized with the pulsed supply to the EOC. The image of the glowing active layer of the diode was projected by microscope objectives from a vacuum liquid-nitrogen cryostat onto the photocathode of the EOC. The experiments showed clearly the emis-

Card 1/2

PLESHKOV, A.

Lumbering

Organized log rafting, Sel'. stroi. 7 No. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

PLESKOT, Vaclav, prof. dr.

Principles of programming for [illegible]
53 no.10 Suppl.:Prakticke prilohy [illegible]

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200009-6

GORBACHEVSKIY, Viktor Andreyevich; LESHKEVICH, Andrey Ivanovich; MIKHAYLOVSKIY, Yuriy Vsevolodovich; SHESTAKOV, Boris Aleksandrovich; NEDNIKOV, I.N., retsenzent; MOROZOV, K.P., retsenzent; KHASMAN, P.Ya., otv. red.; PLESKO, Ye.P., red.; GRECHISHCHEVA, Z.I., tekhn. red.

[Fundamentals of lumbering and the operation of machines and mechanisms] Osnovy lesozagotovok i ekspluatatsiia mashin i mekhanizmov. V.A.Gorbachevskii i dr. Moskva, Goslesbumizdat, 1961. 319 p. (MIRA 15:2)

(Lumbering--Machinery)

CHALAYA, Zinaida Akimovna; POMERANTSEVA, G., redaktor; PLESHKO, V. redaktor; BODROV, A., tekhnicheskiy redaktor.

[Serov, the aviator; a biographical narrative] Letchik Serov; biograficheskaia povest'. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia", 1955. 213 p. (MLRA 8:10)
(Serov, Anatolii Konstantinovich, 1910-1939)

257, 1954). It is noted that the determination of K-mesons, protons, and deuterons requires other methods. In the range > 2 Bev/c, these particles cannot be determined by measuring the ionization and momentum, or by the method applied here. Professor A. I. Alikhanyan is thanked for valuable hints, and V. Sh. Kamalyan, Yu. V. Gorodkov, I. F. Karabekov, B. N. Moiseyev, G. G. Matevosyan, A. V. Petvakanyan, G. M. Lazaryan, K. A. Khurshudyan, V. S. Trusyan, and N. A. Maralyan for assistance. There are 2 figures and 18 references: 10 Soviet and 8 non-Soviet. The four most recent references to English-language publications read as follows: A. G. Barkov, V. Chamany, D. M. Haskin, P. L. Jain, E. Lohrmann, M. W. Teucher, M. Schein, Phys. Rev., 122, 617, 1961; I. H. Atkinson, W. N. Hess, V. Perez-Mendez, R. W. Wallace, Phys. Rev. Lett., 2, 168, 1959; P. H. Barrett, Phys. Rev., 114, 1374, 1959; G. Bozoki, E. Fenyves, L. Janossy. Nucl. Phys., 24, 412, 1961.

ASSOCIATION: Fizicheskiy institut Akademii nauk Armyanskoy SSR (Physics Institute of the Academy of Sciences Armyanskaya SSR)

SUBMITTED: July 28, 1961

Composition of nuclear-active...

± 10% (scintillation counters). Electrons, mesons, and the particles produced in the device were not taken into account. Two series of measurements were carried out: (1) coincidences I + II + III + IV + V - III and recording of particles absorbed by the filters together with their secondary products; (2) coincidences I + II + III + IV + V and recording of all the particles. The results of both series could be used to determine the relative number of pions in the cosmic-ray particle flux. Results: In the momentum range of 1.6 - 22 Bev/c, which contains 90 - 95% of the particles with momenta ≥ 1.6 Bev/c, negative particles comprise about 3% of all the particles. In the momentum range of 160 - 370 Bev/c, the ratio $N_{\pi^+}/N_{\pi^-} = 0.90 \pm 0.15$ was obtained for the nuclear-active cosmic-ray particle flux. In the momentum range of 1.6 - 22 Bev/c, pions account for 6 ± 2% of all the nuclear-active particles. On the assumption that also the five particles with unknown sign, observed above 1.6 Bev/c, are pions, the latter comprise not more than 10% of the nuclear-active cosmic-ray particles at 3250 m above sea level. The results are consistent with published data (Ref. 11: N. M. Kocharyan, G. S. Saakyan, Z. A. Kirakosyan, ZhETF, 25, 1335, 1950; Ref. 40: G. M. Garibyan, I. I. Goldman, ZhETF, 25,

Card 2/3

PLESHKO, M.P.

S/056/62/042/003/013/049
B117/B112

24.6700

AUTHORS: Khrimyan, A. V., Avakyan, V. V., Ka[illegible]ndyan, N. A., Yegiyan, K. Sh., Pleshko, M. P.

TITLE: Composition of nuclear-active cosmic-ray particles with momenta above 1.8 Bev/c at an altitude of 3250 m above sea level. I

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 3, 1962, 663 - 674

TEXT: The nature and momentum spectra of nuclear-active cosmic-ray particles in the momentum range above 1.8 Bev/c were studied on Mount Aragats (Armenia) at an altitude of 3250 m above sea level in order to determine the relative number of pions in the particle flux. The investigations were made with a magnetic mass spectrometer of 6850 oe including a hodoscope, a thin-walled five-layer proportional counter, and five scintillation counters. The momenta from 2 to 20 Bev/c were determined with a mean square error from 10 to 80%. The ionizing power of individual particles was determined with a mean error of ± 14% (gas counter) and

Card 1/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200009-6

PLESHKO, N. P., KHRIMYAN, A. V., AVAKYAN, V. V., [illegible], [illegible],

[illegible]YAN, K. SH., Asantiani, ~~T. I.~~

"The Composition of the Flux of the Cosmic Ray Nuclear-Active Particles of Momenta Higher than 1.8 Gev/c at the Altitude of 3250 m Above Sea Level."

report submitted for the Intl. Conf. on Cosmic Rays and Earth Storm (IUPAP) Kyoto, Japan 4-15 Sept. 1961.

KHRIMYAN, A.V.; AVAKYAN, V.V.; NALBANDYAN, N.A.; YEGIYAN, K.Sh.; PLESHKO, N.P.

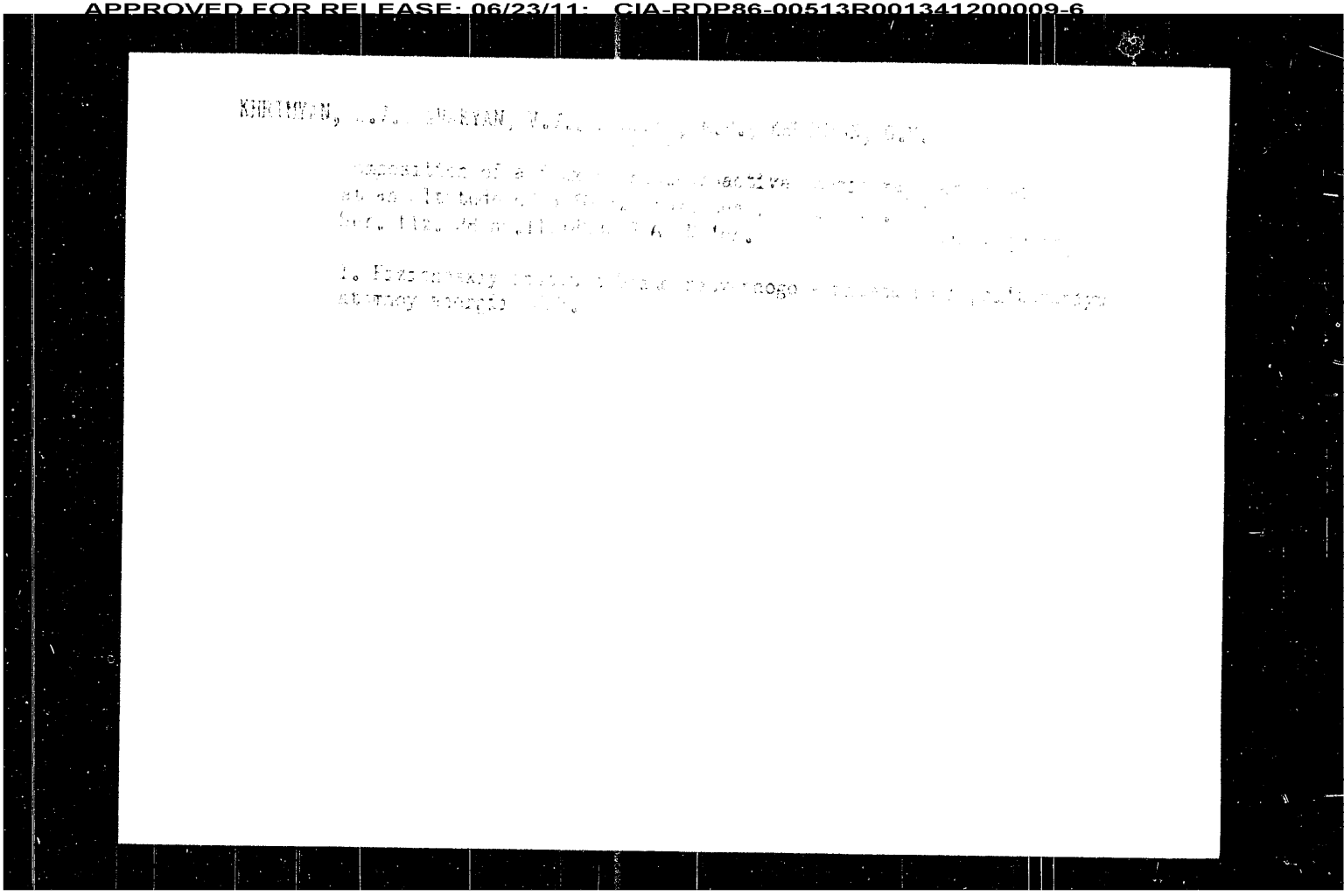
Composition of nuclear active particles in cosmic radiation at an altitude of 3250 m. above sea level with momenta above 1.8 Bev/c. Zhur.eksp.i teor.fiz. 42 no.3:669-674 Mr '62. (MIRA 15:4)

1. Fizicheskiy institut AN Armyanskoy SSR.
(Cosmic rays)

KHRIMYAN, A.V.; AVAKYAN, V.V.; NALBANDYAN, N.A.; YEGIYAN, K.Sh.; PLESKHO, M.P.

Composition of a flux of nuclear-active cosmic ray particles in the region of pulses exceeding 1.8 Bev./c at an altitude of 3250 meters above sea level. Izv. AN SSSR. Ser. fiz. 26 no.6:722-727 Je '62.
(MIRA 15:6)

1. Fizicheskiy institut Akademii nauk Armyanskoy SSR.
(Cosmic rays)



S/048/62/026/006/005/020
B125/B112

AUTHORS: Khrimyan, A. V., Avakyan, V. V., Nalbandyan, N. A., Yegiyan, K. Sh., and Pleshko, M. P.

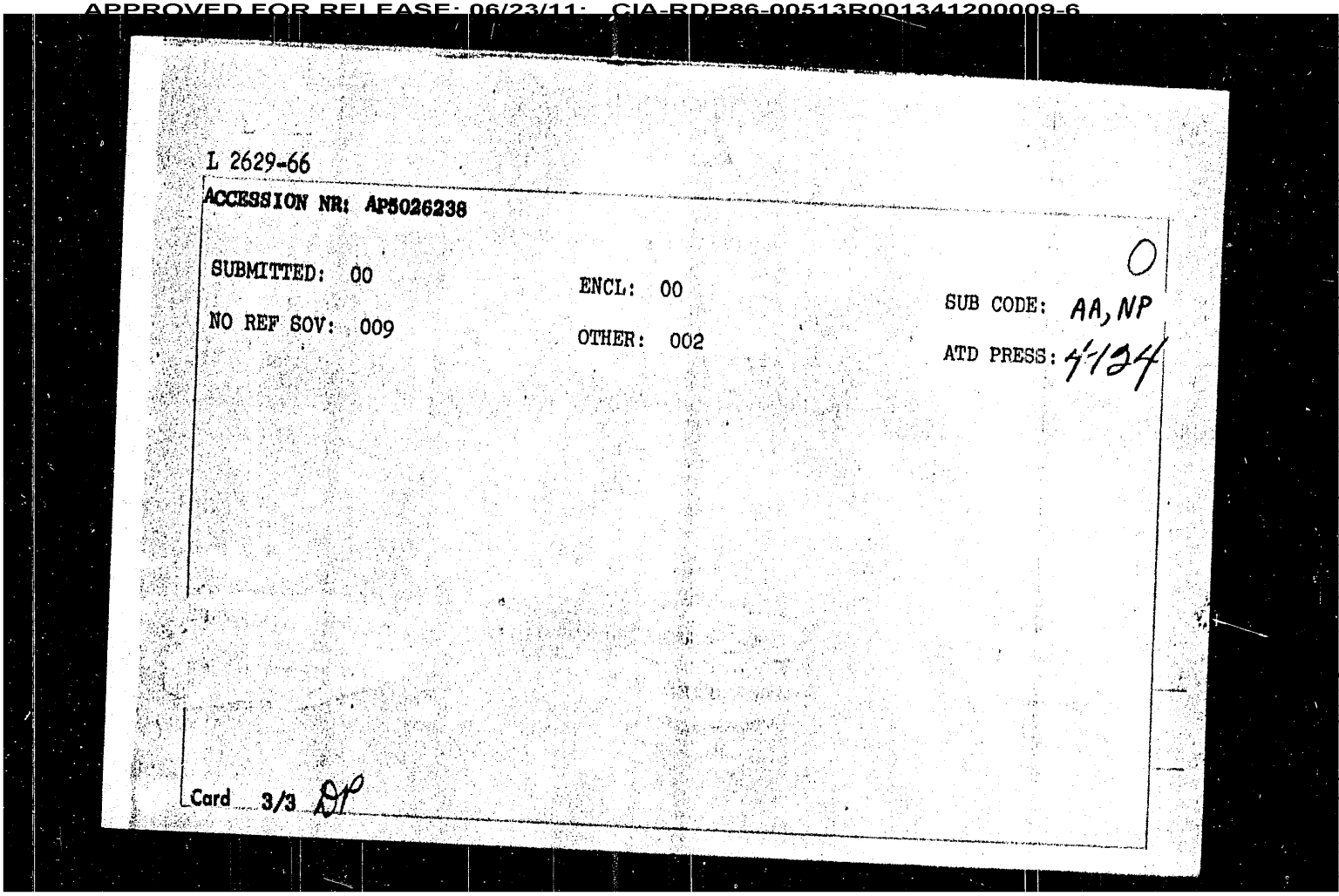
TITLE: Composition of the nuclear active cosmic radiation particle current in the momentum range exceeding 1.8 Bev/c at 3250 m above sea level. I.

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. 6, 1962, 722 - 727

TEXT: The relative number of pions present in the current of nuclear active cosmic radiation particles was determined for momenta above 1.8 Bev, at an altitude of 3250 m on the Aragats mountain in Armenia. A magnetic mass spectrometer (6850 oe) was used, the measuring apparatus comprising also a five-layer gas proportional counter and five scintillation counters. The electrons, the muons, and the particles produced in the measuring apparatus itself were screened out. The first series of measurements recorded mainly the particles absorbed by the filters and their secondary products. In the second series all particles were recorded. At p = 1.8 Bev, 65 positively charged particles were recorded,

Card 1/2

Card 2/2



L 2629-66

ACCESSION NR: AP5026238

SUBMITTED: 00 ENCL: 00 SUB CODE: AA, NP

NO REF SOV: 009 OTHER: 002 ATD PRESS: 4134

Card 3/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200009-6

L 2629-66

ACCESSION NR: AP5026238

6

filled proportional counters. After passing through the magnetic field and the proportional counters, the secondary particle entered an "interaction hodoscope," consisting of a layer of polystyrene, three thin (~15 g/cm^2) layers of lead, and four thick (~43 g/cm^2) layers of copper, with counter trays between them. The data are presented graphically as momentum versus ionizing power plots for the particles that exhibited different specific types of behavior in the interaction hodoscope. From the data presented it is concluded that 15% of the events recorded by a detector surrounded by 10–50 g/cm^2 of heavy metal will be shower events, that the probability of producing a penetrating shower increases with increasing momentum of the initiating particle, that a pion with momentum between 0.1 and 0.7 Bev/c is from two to four times more likely to produce a shower than is a proton of the same momentum, and that it will be difficult to identify primary cosmic ray electrons or γ-rays by observing the showers they produce unless the secondary particles are identified. "The authors express their gratitude to G.V.Khrimyan for discussing the results and for valuable remarks, and to G.G.Matevosyan, E.V.Patvakanyan, G.M. Smsaryan, V.S.Truzyan, and A.A.Oganesyan for assistance with the work." Orig. art. has: 3 figures and 1 table.

[15]

ASSOCIATION: none

Card 2/3

L 2629-66 EWT(1)/EWT(m)/FCC/T/EWA(h) IJP(c) GW

ACCESSION NR: AP5026238 UR/0048/65/029/010/1956/1961

AUTHOR: Khrimyan, A.V.; Avakyan, V.V.; Fleshko, M.P.; Vartanyan, T.G.

TITLE: Investigation of low-energy charged particles with the Cosmos 12, Cosmos 15, and Electron 2 satellites /Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 10, 1965, 1956-1961

TOPIC TAGS: primary cosmic ray, secondary cosmic ray, cosmic ray shower, proton interaction, pi meson

ABSTRACT: The authors, continuing earlier work of one of them (Zh. eksper. i teor. fiz., 35, 1076, 1958), have investigated the production of showers in matter by high energy protons and pions in order to acquire data for estimating the secondary background due to the surrounding material in rocket and satellite measurements of primary cosmic radiation. The measurements were performed at Aragats at an altitude of 3200 m above sea level. The investigated protons and pions were produced in lead by cosmic ray neutrons; their momenta were determined with the aid of a magnetic field, and their ionizing powers were measured with a sequence of five gas-

Card 1/3

PLESKO, Ivan; NOVAK, Ladislav

Significance of the properdin system in the toxic effect of sera on protozoa. Biologia 15 no.9:685-689 '60. (EEAI 10:4)

1. Institut fur Mikrobiologie und Epidemiologie und Institut fur Biologie der medizinischen Fakultat der Komensky-Univerzitat, Bratislava.
(PROPERDIN)
(PROTOZOA)
(SERUM)

BUKOVSKIY, L.E.; SLUTSKIY, V.D.; PLESKACHEV, A.P.; MITYUREV, M.N.

Developing the method for obtaining lithium fluoride. Prom. khim. reak. i osobo chist. veshch. no.1:16-17 '63. (MIRA 17:2)

PLESHKO, I.

High yields of winter wheat. Nauka i pered.op.v sel'khoz. 9 no.1:40-41 Ja '59. (MIRA 13:3)

1. Brigadir polevodcheskoy brigady kolkhoza "Vyatsa noue," Bel'tskogo rayona Moldavskoy SSR.
(Wheat)

. KHRIMYAN, V. V. AVAKYAN, M. P. PLESHKO, G. V. KHRIMYAN

Composition of Cosmic Radiation Flux of Nuclear-active Particles at 3250m above sea level

report submitted for the 8th Intl. Conf. on Cosmic Rays (IUPAP), Jaipur, India, 2-14 Dec 1963

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200009-6

SAZONOVA, N.K., PLESHKO, G.S.

Investigating some types of raw ceramic materials from the Korean People's Democratic Republic. Trudy LTI no.57:30-49 '59.
(MIRA 13:8)
(Korea, North--Ceramic materials)

KHRIMYAN, A.V.; AVAKYAN, V.V.; [illegible]

Generation of air showers by π-mesons and [illegible] of energies of 0.1 to 20 Bev./c in thin plates of a substance. Izv. AN SSSR. Ser. fiz. 29 no.10:1956-1961 O '65. (MIRA 18:10)

PLESHKO, A.P.; PERFIL'YEV, V.V.

Stand with diaphragm vibrators. Izm.tekh.no.2:12-14 F '61.
(Vibrators) (MIRA 14:2)

SOV-115-58-3-22/41

AUTHORS: Pleshko, A.P. and Perfil'yev, V.V.

TITLE: Tuning-fork Vibrostand (Kamertonnyy vibrostend)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 3, pp 57 - 59 (USSR)

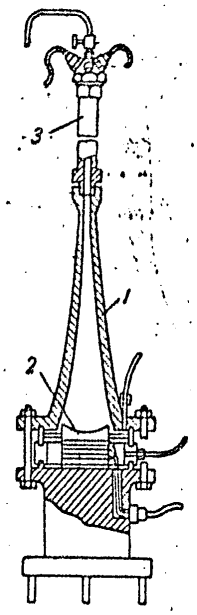
ABSTRACT: The existing vibrostands develop vibration acceleration of no more than several dozen g, whereas in tests of powerful motors or accelerometer transmitters and indicators the high-frequency vibroaccelerations often reach many hundreds g. The described new special tuning-fork vibrostand, consisting of 8 tuning forks, permits dynamic calibration of accelerometer transmitters and indicators as well as durability tests on not too heavy machine parts and components for work in conditions up to 500 g at fixed pre-selected frequencies. Detailed description of design is given and

Card 1/2

PLESHKO, A.P.; PERFIL'YEV, V.V.

Unit for dynamic testing of pressure pickups. Izm.tekh. no.7:17-19 Jl '61. (MIRA 14:6)
(Strain gauges)

ACC NR: AP7009120



1--exponential waveguide compensator; 2--spherical radiating diaphragm,; 3--tubular resonator

SUB CODE: 14/ SUBM DATE: 18May65

Card 2/2

ACC NR: AP7009120 SOURCE CODE: UR/0413/67/000/003/0110/0110

INVENTOR: Pleshko, A. P.; Kashirin, Yu. N.; Pankusov, N. A.

ORG: None

TITLE: A hydroacoustic pulsator for checking pressure gauges. Class 42, No. 191169

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1967, 110

TOPIC TAGS: resonator, waveguide, pressure gage, quality control, piezoelectric transducer

ABSTRACT: This Author's Certificate introduces a hydroacoustic pulsator for checking pressure gauges. The device contains a base which holds a piezoceramic transducer and a working chamber filled with fluid. To increase the amplitude and frequency of the vibrations, the working chamber is made in the form of an exponential waveguide concentrator with the broad end connected to a spherical radiating diaphragm while the narrow end is connected to interchangeable tubular resonators terminating in the head and test pickups.

Card 1/2

UDC: 531.787.913

GERTSIK, E.R.; PLESHKO, A.M.; TURI, E.E.

Analyzing the present status of the automatic and remote control of fields. Trudy VNII no.41:210-226 [illegible]

VOLKOVA, G.A.; BALASHOVA, T.V.; BUCHEVA, V.N.; PLESHKO, A.M.

Economic efficiency of remote control methods in oil production.
Trudy VNII no.22:136-149 '59. (MIRA 15:4)
(Oil fields--Electronic equipment) (Remote control)

VOLKOVA, G.A.; PLESHKO, A.M.

Economic efficiency of using electric sinking pumps. Trudy VNII no.22:126-135 '59. (MIRA 15:4)

(Oil well pumps)

SEREBRYAKOV, Aleksey Alekseyevich; YANKOVSKIY, Konstantin Artem'yevich; PLESHKIN, Mikhail Mikhaylovich; LEVITSKIY, V.S., nauchnyy red.; BABULIN, N.A., nauchnyy red.; BARANOVSKIY, M.A., nauchnyy red.; KOBRINSKAYA, M.V., red.; PERSON, M.N., tekhn. red.

[Mechanical drawing] Cherchenie. 6., ispr. izd. Moskva, Vses. uchebno-pedagog.izd-vo Proftekhizdat, 1961. 225 p. (MIRA 14:12)
(Mechanical drawing--Study and teaching)

PLESHKIN, Mikhail Mikhaylovich; PLESHKIN, Leonid Mikhaylovich; BOBIKOV, P.D., nauchn. red.; [illegible], T.I., red.

[Joints of wooden articles; a collection of drawings] Soedinenija stoliarnykh izdelii; sbornik chertezhei. Moskva, Vysshaia shkola, 1965. 106 p. (MIRA 18:4)

PLESHKIN,M.

Protecting drawings from soiling. Prof.-tekh. obr. 12 no.5: 29 My '55. (MLRA 8:8)

1. Prepodavatel' tekhnicheskogo uchilishcha No.6 (Moskva)
(Drawing room practice)

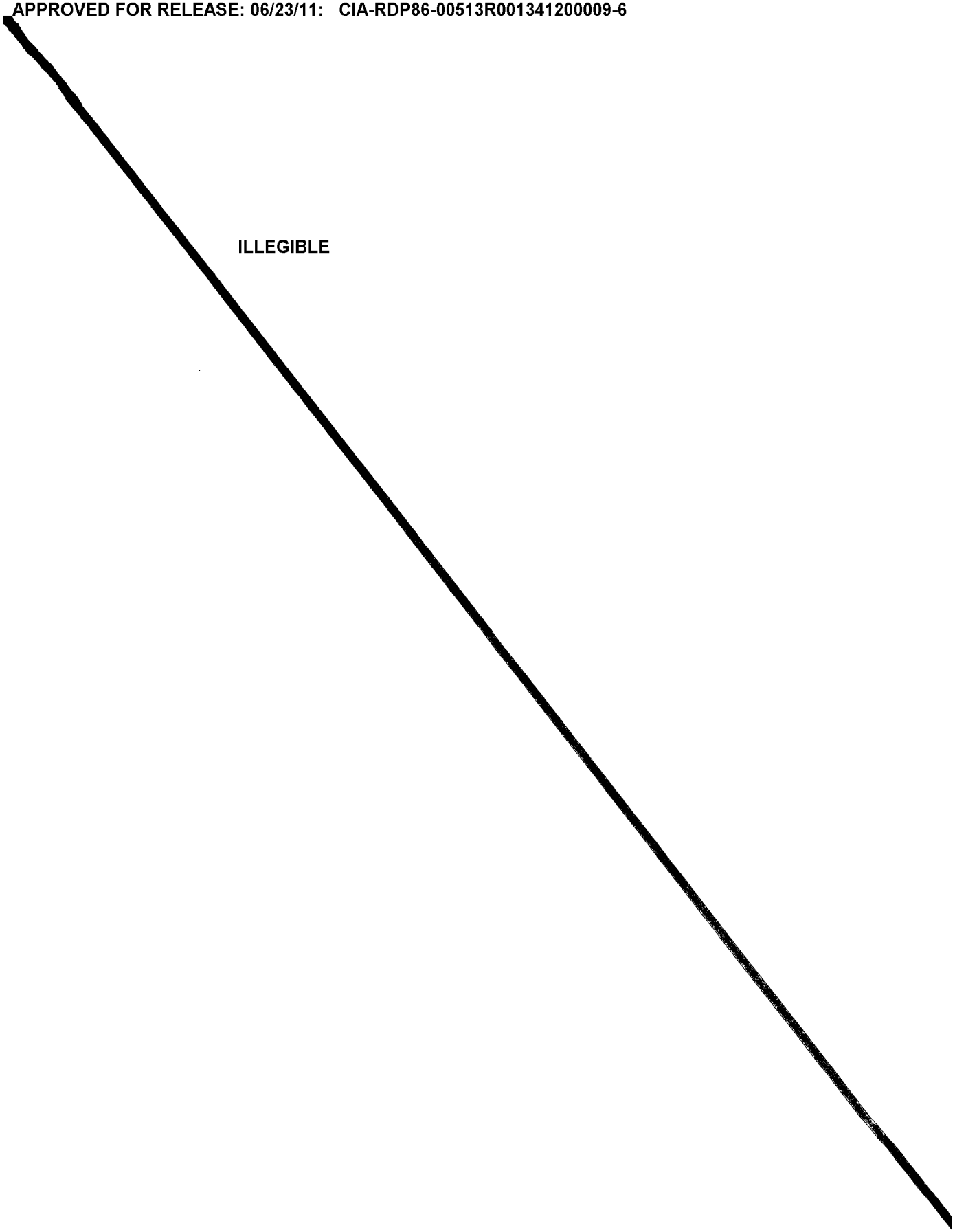
PLESHKIN, Mikhail Mikhaylovich; PLESHKIN, Leonid Mikhaylovich; BOBIKOV, F.S., nauchn. red.; RYCHEK, T.T., red.

[Joints of wooden articles; a collection of drawings] Soedinenija stoliarnykh izdelii; sbornik chertezhei. Moskva, Vysshaia shkola, 1965. 106 p. (MIRA 18:4)

PLESHKIN, L.

"Course in mechanical drawing" by S.K.Bogoliubov, A.V.Voinov.
Reviewed by L.Pleshkin. Mashinostroitel' no.2:47 F '63. (MIRA 16:3)
(Mechanical drawing) (Bogoliubov, S.K.) (Voinov, A.V.)

ILLEGIBLE



Pleshivtseva Ye.A.

CHIGIRIK, Ye.D.; PLESHIVTSEVA, Ye.A.

Controlling ticks in areas where tick-borne encephalitis is endemic. Med.paraz. i paraz.bol.supplement to no.1:59-60 '57. (MIRA 11:1)

1. Iz entomologicheskogo otdeleniya Kemerovskoy oblastnoy protivomolyariynoy stantsii.
(KEMEROVO PROVINCE--TICKS)

VIGDORCHIK, M.Ye.; PLESHIVTSEVA, E.S.; CHEREMISINOVA, Ye.A.

Marine interglacial deposits in the Il'men' Depression. Dokl. AN SSSR 141 no.5:1167-1170 D '61. (MIRA 14:12)

1. Predstavleno akademikom V.N. Sukachevym.
(Il'men' Lake region--Geology, Stratigraphic)

ACC NR: AP7001528

tool greatly improves the surface finish and increases the microhardness of the surface layer. [MS]

SUB CODE: 11, 13/ SUBM DATE: none/ ATD PRESS: 5110

Card 2/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200009-6

ACC NR: AP7001528 SOURCE CODE: UR/0193/66/000/012/0005/0006

AUTHOR: Khvotostukhin, L. A.; Pleshivtsev, N. V.; Bibayev. V. N.

ORG: none

TITLE: Machining of 1Kh18N2AG5 stainless steel

SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 12, 1966, 5-6

TOPIC TAGS: stainless steel, high strength steel, chromium, nickel, manganese steel, nitrogen containing steel, ~~steel~~ mechanical property, steel machining/1Kh18N2AG5 steel

ABSTRACT: The Moscow Institute of Aviation Technology has developed low-nickel high-strength stainless 1Kh18N2AG5(EP-26) steel as a substitute for 1Kh18N10T[AISI321] steel. The 1Kh18N2AG5 steel, in which a great part of the nickel is replaced by manganese and nitrogen, belongs to the austenitic-ferritic class and contains more than 70% austenite. The steel has high mechanical properties, a tensile strength of 117 kg/mm^2, a yield strength of 50 kg/mm^2, an elongation of 30%, an HB hardness of 240 kg/mm^2, and quite satisfactory machinability. It is recommended for aircraft engines and other industrial uses. Sintered carbide-tipped tools are recommended for machining the steel. Sintered T15K6 and VK8 tips are recommended for rough machining and T15K6 tips for semifinished and finished machining. A satisfactory surface finish is produced at cutting speeds above 40 m/min. Subsequent burnishing with a diamond

Card 1/2 UDC: 621.9: 669.14.018.8

the critical values of j for Si, A and Kr are equal to 0.5, 0.4 and 0.3 respectively. It is shown that the sputtering coefficient S is also independent of the target temperature (up to 680 °C). The sputtering coefficient increases as the angle of incidence α is increased from a value of about 9 at $\alpha = 0^{o}$ to over 20 at $\alpha = 70^{o}$. In this range $S_{\alpha} = S_{o} \sec \alpha$, where S_{o} is the sputtering coefficient for normal incidence of ions at the target surface. The difference in S for ion energies of 10 KeV and 30 KeV is not large.
There are 5 figures.

SUBMITTED: May 5, 1961

Card 3/3

36866
S/141/62/005/001/014/024
E039/E135

26.2312

AUTHOR: Pleshivtsev, N.V.

TITLE: Dependence of the sputtering coefficient for copper on the target temperature, current density and angle of incidence of argon ions with energies of 10 to 30 KeV

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, v.5, no.1, 1962, 136-143

TEXT: Previous papers on this subject have provided contradictory information; hence the work described in this paper was undertaken. The dependence of the sputtering coefficient S on the target temperature, ion current density and angle of incidence were investigated by means of an ion gun. It is shown that the sputtering process is greatly influenced by the formation of a film on the target which consists of oxides and other chemical compounds. It is possible to remove this film by decreasing the pressure of the residual gas to $\sim 10^{-10}$ mm Hg or alternatively by sputtering. As it would

Card 1/3

YURASOVA, V. Ye.; PLESHIVTSEV, N.V.; ORFANOV, I.V.

Directed emission of particles in the sputtering of copper single crystals by ion beams with energies up to 50 Kev. Zhur. eksp.i teor.fiz. 37 no.4:966-972 O '59.
(MIRA 13:5)

1. Moskovskiy gosudarstvennyy universitet.
(Sputtering (Physics)) (Copper crystals)

PLESHIVTSEV, N.V.

Measuring current density in ion beams by means of cathode sputtering. Prib. i tekh. eksp. 6 no.1:163-164 Ja-F '61. (MIRA 14:9)

(Ion beams--Measurement)

PLESHIVTSEV, N.V.

Dependence of the diffusion coefficient of copper on the target temperature, current density, and incidence angle of argon ions with energies of 10-30 kev. Izv.vys.ucheb. zav.;radiofiz. 5 no.1:136-143 '62. (MIRA 15:5)

(Thermionic emission)
(Copper) (Argon)

S/117/62/000/008/004/005
I007/I207

AUTHORS: Metelkin, I.V., Metelkin, V.V., and Pleshivtsev, N.V.

TITLE: Machining output in ultrasonic cutting

PERIODICAL: Mashinostroitel', no. 8, 1962, 33-34

TEXT: A study is presented of the factors affecting machining output in ultrasonic cutting, and experimental results are reported. Graphs showing the dependence of machining output on the abrasive-grain size, the ultrasonic-oscillation and the amplitude, were plotted on the basis of these results. Increasing the abrasive grain-size was found to augment considerably the machining output. The graphs for ultrasonic cutting, although plotted only for the cutting of hard alloys and glass, may also be used for other materials. Appropriate conversion coefficients (given in this paper) should be used. There are 3 figures and 1 table.

Card 1/1

METELKIN, I.V.; METELKIN, V.V.; PLESHIVTSEV, N.V.

Efficiency of ultrasonic cutting. *Mashinostroitel'* no.8:33-34 Ag '62. (MIRA 15:8)

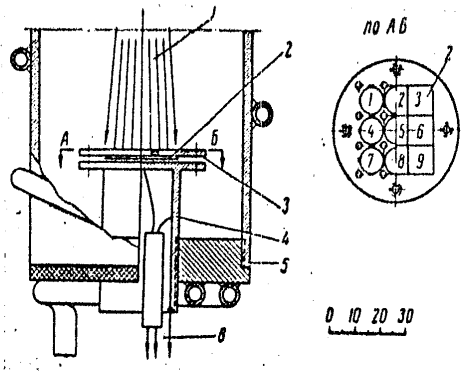
(Ultrasonic metal cutting)

20708

S/120/61/000/001/049/062
E192/E382

Measurement of ....

Fig. 1:



Card 4/4

Measurement of ....

current was determined by measuring the heat transfer through the walls of the copper cylinder. The beam of the hydrogen ions was produced by an arc source provided with a double plasma compression (Ref. 1) and a single electrostatic lens (Ref. 8). The experimental conditions were as follows: accelerating voltage 30 and 39 keV, current 8.6 and 7.8 mA, duration of the bombardment 210 and 145 min and target temperature 250 °C. From the experiments it was found that the weight of the sputtered copper, referred to the unit area, follows the shape of a Gaussian curve as a function of the radius. It is also pointed out that the cathode sputtering can be used for measuring the intensity of non-charged atomic particles and the ion component of plasma beams. The author thanks B.K. Shembel for his interest and help, S.N. Popov and D.V. Karetnikov for supplying the ion gun and A.M. Rodin for valuable remarks. There are 2 figures and 8 references: 6 Soviet and 2 non-Soviet.

SUBMITTED: December 14, 1959

S/120/61/000/001/049/062
E192/E382

Measurement of ....

where i is the current density of the ions in mA/cm^2,

m is the mass of the sputtered substance in mg/cm^2,
A is the atomic weight of the material of the target,
S is the sputtering coefficient (atoms per ion), and
t is the time in seconds.

The measurement of the ion current density in a hydrogen ion beam was carried out by means of an ion gun described in Ref. 7. The details of the target are shown in Fig. 1. There were 9 targets made of copper foil having dimensions of 10 x 10 x 0.1 mm. These were fixed at the bottom of the copper cylinder 4 (see Fig. 1) by means of the disc 3. The disc had 9 holes of 8.5 mm in diameter and 16 holes with a diameter of 3.3 mm. The ion beam passed through the holes and hit the targets and sputtered them. The targets were weighed by means of a micro-balance with an error of 0.02 mg and were situated beyond the focus of the beam at a distance of 15 cm. The temperature of the targets was measured by means of a thermocouple 6 and the total ion

20708

S/120/61/000/001/049/062
E192/E382

26.2312

AUTHOR: Pleshivtsev, N.V.

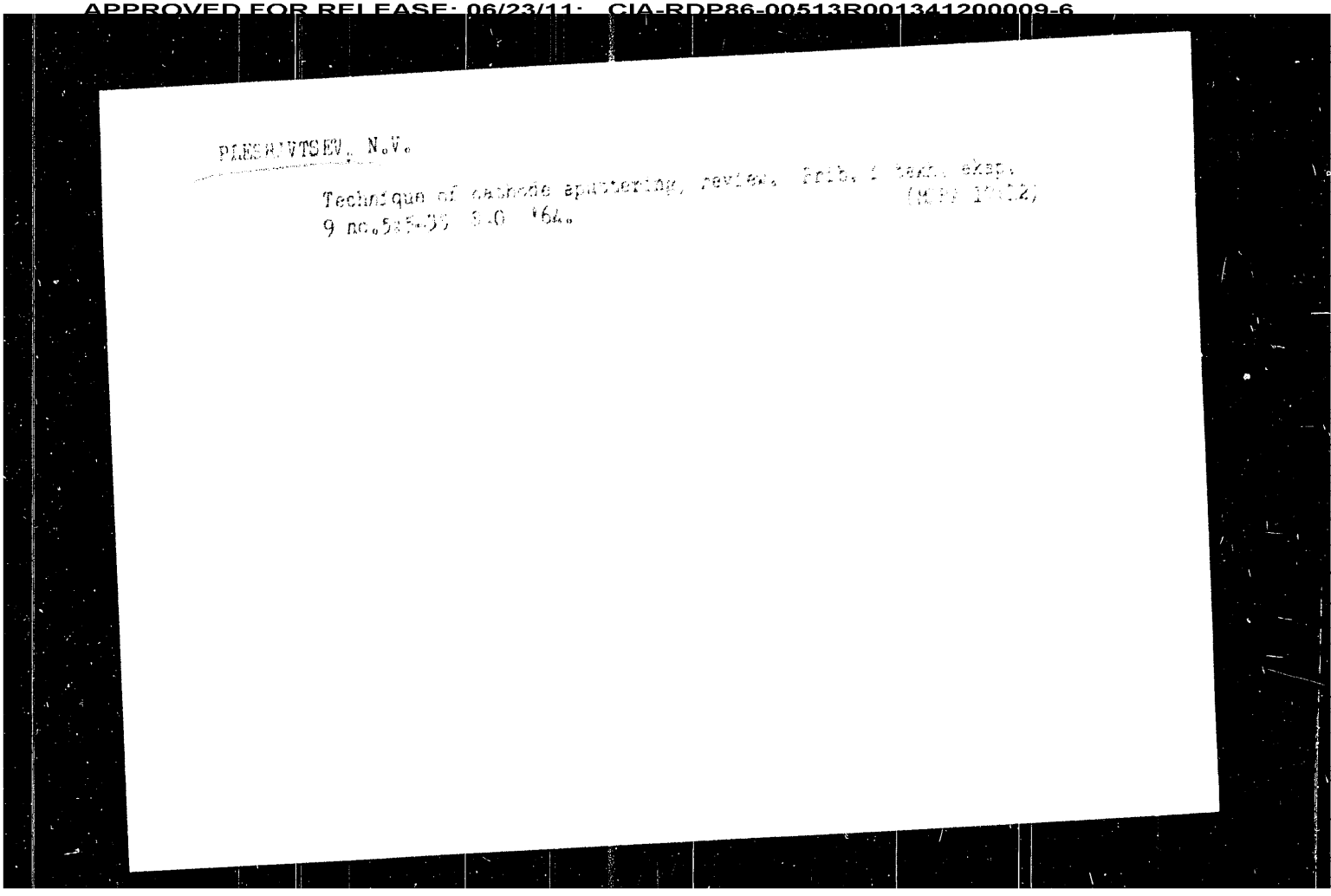
TITLE: Measurement of the Current Density in Ion Beams by Means of Cathode Sputtering

PERIODICAL: Pribory i tekhnika eksperimenta, 1961, No. 1, pp. 163 - 164

TEXT: The sputtering coefficient of metals (the number of the atoms of a target sputtered by a single ion) is almost independent of the presence of impurities or the thermal processing of the metal (Ref. 4) and provided the surface temperature of the target is not higher than 300 or 400 °C the coefficient is also independent of the ion current density (Refs. 4-6). These circumstances give the possibility of employing the sputtering in the measurement of the absolute current densities in ion beams and plasma. For this purpose, it is necessary to determine the weight of the sputtered substance ejected by a unit area of the target in unit time. This is expressed by:

$$i = 96\,500\ m/tAS \qquad (1)$$

Card 1/4



PARSHAVTSEV, N.V.

Technique of cathode sputtering, review. Prib. i tekh. eksp. (MIRA 17:12)
9 no.5:35-39 S-O '64.

PLESHIVTSEV, N., nauchnyy sotrudnik.

Observing the motion of atoms. IUn.tekh. 2 no.11:31-32 N '57. (MIRA 10:11)

1. AN SSSR. (Atoms)

ACCESSION NR: AT4049237

character of different landmarks is discussed. Office analysis and identification procedures are described. Using the reconnaissance survey method the accuracy of determinations of the horizontal position of the aircraft over the land is determined for the most part by errors arising in plotting the center of the photograph on the topographic base and in transfer to office maps. This error should not exceed ±0.5 mm (on a 1:100,000 map this error is equal to ±50 m). Other errors are associated with camera tilt and influence of relief. Mean square error in plotting the center of the photograph on the map is ±60 m. The described method for determining the horizontal position of a survey aircraft is valuable in reconnaissance surveys for finding mineral deposits and in geological mapping. It is particularly effective in large-scale surveys from flight altitudes up to 100 m. Orig. art. has: 1 formula, 4 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: ES

NO REF SOV: 008 OTHER: 000

Card 2/2

L 20130-65 EWT(1)/EEC(b)-3/T/ Pae-2 IJP(c)/ESD/ESD/AFTC/ASD(a)-5/AFETR/RAEM(1)/
ESD(gs)/ESD(t) GW

ACCESSION NR: AT4049237 S/3109/64/000/003/0156/0163

AUTHOR: Pleshivtsev, G. A. 84

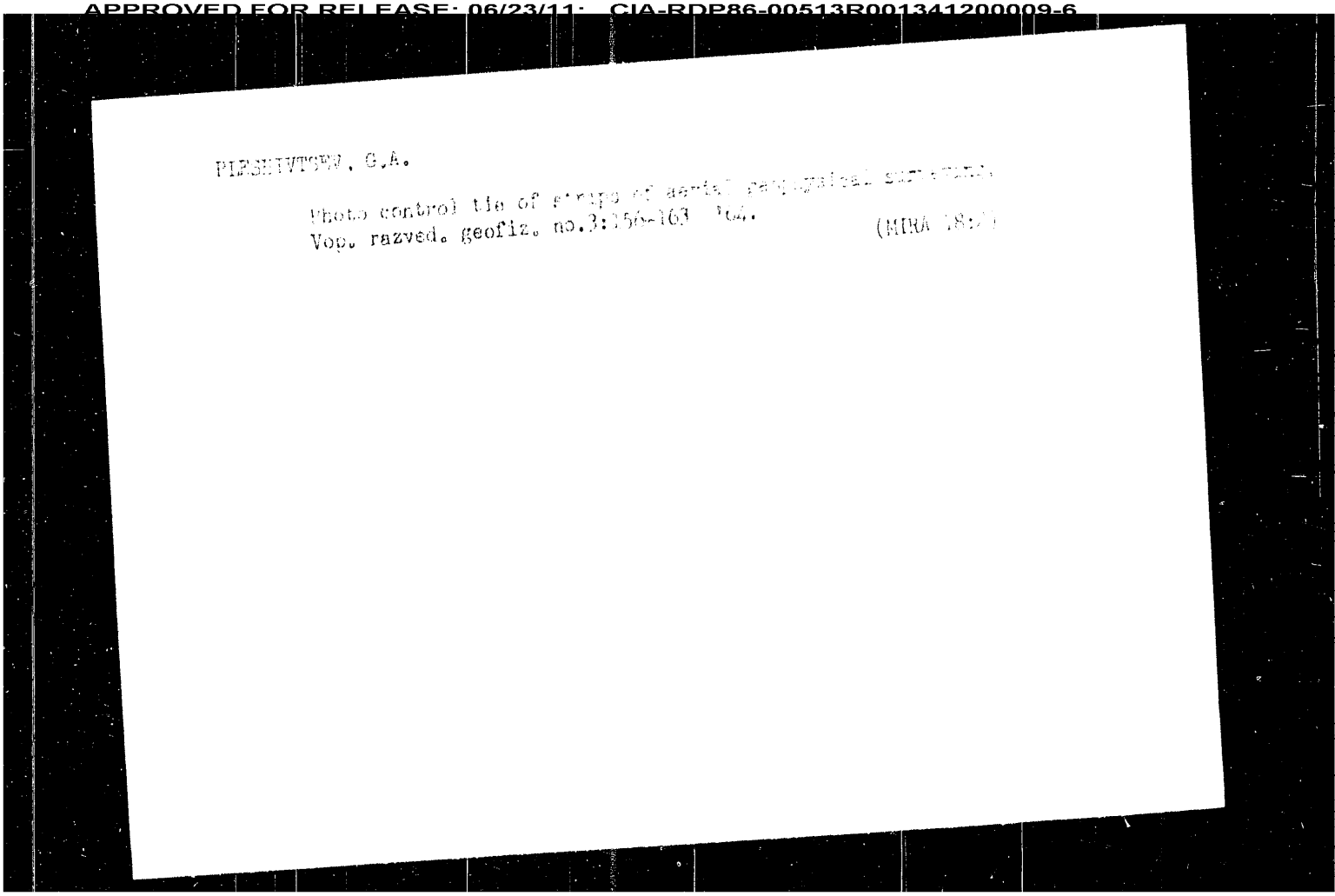
TITLE: Photogrammetric control of aerogeodetic survey flight lines

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut razvedochnoy geofiziki. Voprosy* razvedochnoy geofiziki, no. 3, 1964, 156-163

TOPIC TAGS: geodesy, photogrammetry, photogrammetric control, aerial photography, aerial camera, geological prospecting

ABSTRACT: The author discusses the photogrammetric control of flight lines and maps of flight lines. Most of the material presented indicates that the method is based largely on standard aerial survey practice. Landmarks were photographed with the aerial cameras AFA-TE-55 and AFA-37; the relative advantages of different cameras for use in reconnaissance surveys are discussed. An apparatus for installation of aerial cameras aboard survey aircraft is described and illustrated. The author stresses that the aircraft navigator can easily service the cameras and there is no need to add an extra member to the crew for this purpose. The

Card 1/2

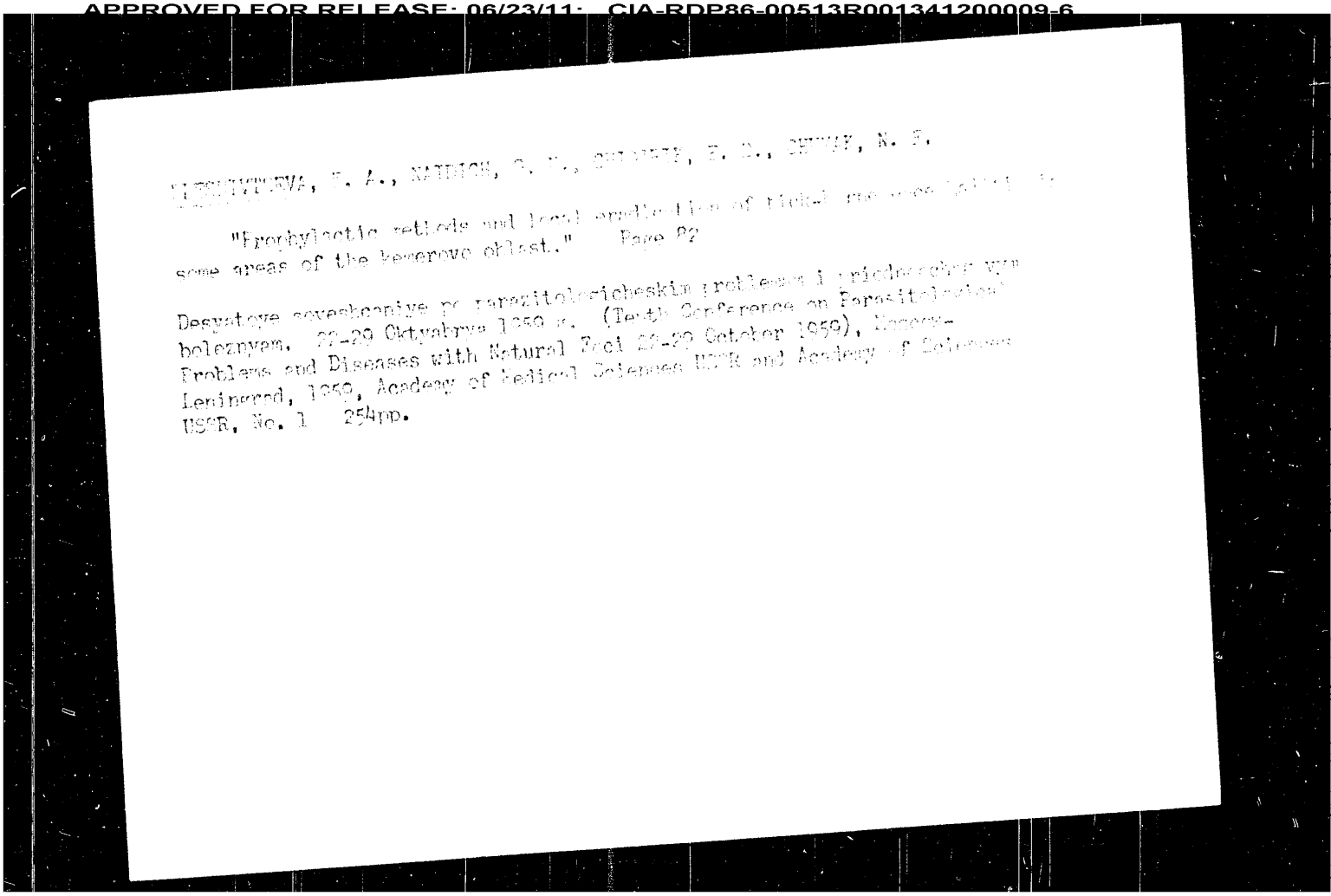


PIRSHTYTSYN, G.A.

Photo control tie of strips of aerial panoramic surveys.
Vop. razved. geofiz. no.3:156-163 '64. (MIRA 18:2)

PLESHIVTSEV, G.A.; PRASOLOV, E.M.

Grid and nomogram for computing uranium, thorium, and potassium content in rocks by the method of relative intensities in aerogamma-spectrometric surveying. Vop. rud. geofiz. no.5: 154-158 '65. (MIRA 18:9)



"Prophylactic methods and local application of [illegible] in some areas of the Kemerovo oblast." Page 82

Desyatoye soveshchaniye po parazitologicheskim problemam i prirodnoochagovym boleznyam, 22-29 Oktyabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

METELKIN, V.V.; METELKIN, I.V.; PLESHIVTSEV, N.V.

Tools for ultrasonic machining. Mashinostroitel' no.12:16 D '64. (MIRA 18:2)

GURIYEV, [illegible]; [illegible]; [illegible]

Geothermal conditions of the [illegible] complex metal [illegible] in the Northern Caucasus. Izv.vys.ucheb.zav.; [illegible] 8 [illegible] 131 F '65. (MIRA 18:3)

1. Severo-Kavkazskiy gornometallurgicheskiy institut.

ACC NR: AP7002170 SOURCE CODE: UR/0089/66/021/006/0511/0512

AUTHOR: Subbotin, V. I.; Ivanovskiy, M. N.; Arnol'dov, M. N.; Shmatko, B. A.; Pleshivtsev, A. D.

ORG: none

TITLE: Control of the content of oxygen and hydrogen impurities in molten sodium by measuring the electric resistance

SOURCE: Atomnaya energiya, v. 21, no. 6, 1966, 511-512

TOPIC TAGS: liquid metal, resistivity, hydrogen, oxygen, gas analysis

ABSTRACT: In view of the conflicting data in the literature concerning the dependence of the electric resistance of liquid sodium on its oxygen content, the authors measured with a dc double bridge the resistivity of sodium at 350C as a function of the oxygen and hydrogen concentrations. The hydrogen and the oxygen were introduced into the circulating liquid sodium in gaseous form. The amount of introduced gas was determined by measuring its pressure in a vessel of known volume kept at a given temperature. The chemical compositions of the sodium, oxygen, and hydrogen employed are given. The results show that oxygen does not change the resistance of liquid sodium, accurate to 5×10^{-8} ohm, but the resistivity does change linearly with increasing hydrogen concentration. Consequently, by measuring the electric resistivity of liquid sodium it is possible to monitor the hydrogen content with accuracy 3×10^{-5}% by weight, but the oxygen content cannot be monitored. Orig. art. has: 1 figure and 1 table.

SUB CODE: 20/07/ SUBM DATE: 23Jun66/ ORIG REF: 001/ OTH REF: 003

Card 1/1 UDC: 621.039.534.6

PLESHIKO, D. I.

Industrial waste used for feed stuffs in Tajikistan Stalinabad, Tadzhikskoe gos. izd-vo, 1942. 25 p.

1. Feeding and feeding stuffs
2. Factory and trade waste.

PLESHEYEV, I.S.; SHAPOV, A.I.; SHLEZINGER, A. Ye.

Structures of eastern Mangyshlak and adjacent territory in the Ustyurt Plateau. Biul. MOIP Otd. geol. 36 no.1:40-58 Ja-F '61. (MIRA 14:5)

(Mangyshlak Peninsula--Geology, Structural)
(Ustyurt Plateau--Geology, Structural)

PLESHEV, A.; DONSKOY, N.

For the consumer in rural areas. Radio no.[illegible]

1. Nachal'nik Glavnogo upravleniya po torgovle promyshlennymi tovarami Soyuza potrebitel'skikh obshchestv RSFSR (for [illegible]).

YUGOSLAVIA/Organic Chemistry. Natural Compounds and Their Synthetic Analogs. G

Abs Jour; Ref Zhur-Khimiya, No 21, 1958, 70930.

grams of V, 20 grams of PCl_5 and 40 ml of CCl_4 is heated. After the exothermic reaction has ceased, the mixture is boiled for one hour, the solvent and $POCl_3$ are vacuum distilled, and to the reaction product a 10% aqueous NaOH solution is added. The VI is steam distilled, and is isolated in a 62% yield, b.p. 107°C/15 mm, n_D^{20} 1.4491, d_4^{20} 0.8483, α_D^{20} - 8.30°, $[\alpha]_D^{20}$ -9.78°. 6.6 grams of I is reduced to II with lithium aluminum hydride (2 grams) in ether (20° C., 5 hours); yield, 94%, b.p. 110°C/10 mm, n_D^{20} 1.4558, d_4^{20} 0.8558, α_D^{20} + 4.6°, $[\alpha]_D^{20}$ + 5.37°.

To a solution of 5 grams of II in 20 ml of petroleum ether and 2.4 ml of pyridine is added 5 grams of PBr_3

Card : 4/5 40

Card : 5/5

+ 4.97°, [α]D + 5.45 . ...

Card : 2/5

39

YUGOSLAVIA/Organic Chemistry. Natural Compounds and Their Synthetic Analogs. G

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70930.

grams of $SOCl_2$ in 200 ml of petroleum ether are boiled for two hours. The chloro anhydride of I thus is obtained (50% yield, b.p. 75-76°C/2 mm) is dissolved in ether and the solution is saturated with ammonia. V is formed in a 30% yield in respect to I, m.p. 82-83°C (from petroleum ether). When purified $SOCl_2$ is used, the yield of the chloro anhydride of I is as high as 90%. V can also be prepared by an alkaline hydrolysis of VI. When I is boiled with $SOCl_2$ (without any solvent), followed by the action of ammonia, the (+)-amide, 2,6-dimethyl-2-chloro-heptane-7-acid is formed, m.p. 109-110°C (from petroleum ether), $[\alpha]^{2?}_D$ + 7.6° (1 10 cm; 0.5 grams in 10 ml of alcohol). A mixture of 12.5

Card : 3/5

YUGOSLAVIA/Organic Chemistry. Natural Compounds and Their Synthetic Analogs. G

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70930.

Author : Lukesh, Zobachova, Pleshek.
Inst :
Title : The Absolute Configuration in the Citronellal Series.

Orig Pub: Croat. chem. acta, 1957, 29, No 3-4, 201-205.

Abstract: The authors synthesized the following compounds using (+) citronellic acid (I) as the starting material: (+) citronellol (II), (-)-citronellyl bromide (III), (+)-2,6-dimethyloctene (IV), (+) citronellamide (V), (-)-citronell nitrile (VI) methyl ester of I.
Applying a known absolute configuration of citronellal, the authors established that I-III, V and

Card : 1/6

Voltage Stabilization of Generators with Permanent-magnet Fields

variation of the flux in the air gap is not greater than 1.5:1. Otherwise sub-magnetisation should be combined with some degree of capacitance compensation.

There are 1 table, 9 figures, and 4 Soviet references.

SUBMITTED: January 24, 1958

1. Generators--Performance 2. Generators--Equipment
3. Voltage stabilizers--Applications 4. Generators--Control systems

Card 5/5

Voltage Stabilization of Generators with Permanent-magnet Fields

of sub-magnetisation (see Fig 8). The maximum and minimum sub-magnetisation currents and the regulation characteristics can then be plotted, as shown in Fig 9. Calculations are then made of the time constant of the sub-magnetisation winding. The generator efficiency is little affected by sub-magnetisation at full load, but at no-load sub-magnetisation accounts for 5 - 8% of the rated output power. The use of sub-magnetisation has disadvantages; the special winding is difficult to manufacture; the air-gap flux changes relatively little for quite a large change in sub-magnetisation. A generator with sub-magnetisation is somewhat larger than one without it. It is recommended to use sub-magnetisation when the number of poles does not exceed eight and the ratio of

in the air gap. These distortions were measured with a harmonic analyser in two particular generators and the results are tabulated. Oscillograms of armature flux and air gap induction for the two machines are reproduced in Figs 4 and 5. Both curves contain appreciable even harmonics, but the output voltage of the generator is scarcely affected thereby because of the way the windings are connected. Output phase-voltage wave-shapes, with and without sub-magnetisation, are reproduced in Fig 6: with sub-magnetisation, the third harmonic is up to 24%, the fifth, seventh and ninth harmonics are 1%, 2% and 3.5% respectively. The third harmonic has no effect in three-phase machines, and can be suppressed under favourable circumstances, in single-phase machines. A simplified method is then given for calculating the no-load characteristics with sub-magnetisation; the general procedure is much the same as when sub-magnetisation is not used. The armature induction wave-shape is found in the usual way, and the family of curves of induction as a function of a.s. ampere-turns is determined for a number of different values

Voltage Stabilization of Generators with Permanent-magnet Fields

magnetic circuit to control the leakage flux according to the load, but the accuracy of voltage control obtained in this way is not high. Again, there are several ways of controlling the generator output voltage by mechanically altering the armature magnetic circuit, but machines of this kind are very complicated to manufacture. A new method of voltage stabilization for permanent-magnet generators employs d.c. sub-magnetisation with a distributed annular winding of the form depicted in Fig 1. If this winding is excited with d.c., a flux is set up in the armature which alters the main flux of the machine. The sub-magnetisation current is least when the generator is fully loaded, and vice versa. Control may be manual or automatic. The method of calculating the sub-magnetisation current is given. The first step is to determine the no-load voltage of the generator graphically, as shown in Fig 2. The method of determining the output voltage as a function of the sub-magnetising direct current is then explained, with reference to Fig 3. The calculations are complicated by the fact that sub-magnetisation distorts the wave-shape of the armature flux and also distorts the magnetic induction and distribution

SOV/110-58-9-7/20

AUTHORS: Al'per, M.Ya. (Candidate of Technical Science) and Pleshchunov, N.N. (Engineer)

TITLE: ~~Voltage Stabilization~~ of Generators with Permanent-magnet Fields (Stabilizatsiya napryazheniya generatorov s postoyannymi magnitami)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Nr 9, pp 29-34 (USSR)

ABSTRACT: The application of generators with permanent-magnet fields is restricted by difficulties of voltage control. The generator voltage can be stabilised either by special stabilisers or by altering the characteristics of the machine according to the load, temperature or other conditions. This latter method is usually somewhat imperfect. Series or parallel capacitor compensation can be used: with the former the voltage remains steady to within 3% over the entire load range unless the power factor is high, in which case the voltage variation is up to 5%. Similar results, though somewhat better at high power factor, can be obtained with parallel capacitor compensation. Capacitor compensation gives no temperature correction and is bulky and heavy. Saturating wedges can be fitted in the rotor

Card 1/5

Selection of the Optimum Parameters of Permanent-Magnet Rotors

inadvisable to make the depth from the pole root to the central bore more than half the pole width. The utilization of the magnet is greatest for a certain ratio of pole width to height which depends on the number of poles, the magnetic permeability and the method of treatment of the magnet. The optimum value of the ratio is best determined from empirical curves. Test results are given for a generator with permanent-magnet field, and the importance of correctly selecting the type of alloy for the rotor is explained. Certain corrections that may be introduced into the calculations to make the selection of geometry more accurate are then briefly described. There are 10 figures, 3 tables and 2 Soviet references.

SUBMITTED: June 22, 1960

5/110/61/000/001/015/023
E194/E455

Selection of the Optimum Parameters of Permanent-Magnet Rotors

varied widely. The rotors were of 90 mm outside diameter and 45 mm long with 4, 6, 8 and 12 poles. Curves of the various utilization factors were plotted as functions of the main geometrical characteristics. The utilization factor of the magnet depends on the properties of the magnetic material, i.e. the B/H ratio. Different alloys were used having permeabilities ranging from 9 to 50. Curves of the utilization factors as functions of permeability were determined. Rotors of anisotropic alloys were tried. They were first tested in the isotropic condition and then were treated in a magnetic field to make them anisotropic. Utilization factor curves were again plotted. On the basis of the results, recommendations are made about choice of rotor dimensions. When anisotropic magnets are used the increase in utilization of rotor volume is not proportional to the increase in the product B H but is somewhat less. As the depth from the pole root to the central bore increases the absolute utilization of the magnet increases, at first rapidly and later, when the thickness is greater than half the pole width, considerably slower. It is

Card 3/4

S/110/61/000/001/015/023
E194/E455

Selection of the Optimum Parameters of Permanent-Magnet Rotors

The following utilization factors of the magnet are then defined: the flux utilization factor; the coercive force magnetization factor; and the energy utilization factor. Correct selection of geometry and grade of alloy should be made with allowance for behaviour of the rotor after stabilization. Accordingly, flux and energy utilization factors after stabilization are also defined. The data required to determine the utilization factors were obtained from the demagnetization curves which were determined experimentally with a flux meter and measuring loop located at the bottom of the magnet slots. The curves were obtained in an experimental stator, with a sinusoidal mmf wave acting on the magnet, which corresponds quite closely to the operating conditions of the magnet in a machine. Tests on magnet geometry were made with an isotropic alloy of the following analysis: Ni - 15; Al - 8; Co - 24; Cu - 3; Ti - 1.5; Nb - 0.1; S - 0.2; remainder iron. The main geometrical characteristics are the pole width, the pole height and the depth from the pole root to the central bore. Tests were made on a great many rotors in which these parameters

Card 2/4

S/110/61/000/001/015/023
E194/E455

AUTHOR: Pleshchunov, N.N., Engineer

TITLE: Selection of the Optimum Parameters of Permanent-Magnet Rotors

PERIODICAL: Vestnik elektropromyshlennosti, 1961, No.1, pp.46-52

TEXT: Despite the extensive use of alternators with permanent-magnet excitation, sufficient attention has not yet been paid to the selection of rotor geometry and magnetic material. This article gives the results of investigations on permanent-magnet rotors and offers recommendations about rotor geometry and selection of grade of alloy. It also recommends utilization factors, which are required for checking the design of alternators. The use of permanent-magnet rotors was investigated experimentally on a large number of magnets to obtain the following relationships: the influence of rotor geometry with a given grade of alloy, and the influence of different grades of alloy with a given rotor geometry. Most of the rotors were made of isotropic alloys of the type of Alni and Alnico, However, alloys of the type of Magnico heat-treated in a magnetic field have recently come to be used for these generators, and so magnets of anisotropic alloys were tested.

Card 1/4

AL'PER, N.Ya., kand.tekhn.nauk; PLESHCHUNOV, N.N., inzh.

Stabilizing the voltage of generators equipped with permanent magnets.
Vest. elektroprom. 29 no.9:29-34 S '58. (MIRA 11:10)
(Electric generators) (Voltage regulators)

PLESHCHUNOV, N.N., inzh.

Choice of optimum parameters of star-shaped permanent magnets.
Vest. elektroprom. 32 no.1:46-52 Ja '61. (MIRA 14:3)
(Electric generators)

Selection of the optimum parameters...

coefficient is the product of the first two. The stabilisation in air was taken as a measure of magnet stabilisation. The data necessary to determine the utilisation factor were obtained from experimental demagnetisation curves plotted by means of a flux meter and measuring loop placed on the magnet. The utilisation of magnet spiders of isotropic alloys was investigated as a function of their geometry. The tests were made using the commonest pole configuration with parallel edges and the minimum manufacturing radius at the slot bottom of the spider. The utilisation of unstabilised magnets of isotropic alloys increases with increasing μ depending upon the properties of the magnetic alloys. This is probably to be explained by the more complete magnetisation of the volume of magnets of lower coercive force. With increasing μ the utilisation of stabilised magnets decreases because magnets with low coercive force are subject to marked demagnetisation during stabilisation. The use of magnets with very low value of μ is somewhat impaired because of difficulties in magnetisation, and this is particularly marked with increase in the number of poles and in the pole height. In stabilised magnets of

S/196/61/000/009/029/052
E194/E155

AUTHOR: Pleshchunov, N.N.

TITLE: Selection of the optimum parameters of permanent-magnet spiders

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.9, 1961, 23, abstract 9I 154. (Vestn. elektroprom-sti, no.1, 1961, 46-52)

TEXT: Results are given of an investigation of magnet spiders on the basis of which recommendations are made for selection of optimum geometry and grade of alloy and also of utilisation factors necessary for check calculations of synchronous generators. A relationship is established between the utilisation of magnets of different geometry using a given grade of alloy and of magnets with different grades of alloy of given geometry. The magnets were first investigated in the isotropic condition and then, after treatment in a magnetic field, in the anisotropic condition. The degree of utilisation of the magnets was assessed and they were compared with one another in respect of the following utilisation factors: flux; magnetising force; energy. The latter

Card 1/3

PLESHCHITSER, A.Ya.(Gor'kiy)

Biological role of magnesium.Usp.sovr.biol.40 no.1:52-67 Jl-Ag '55. (MLRA 8:10)

(MAGNESIUM,
biol.role, review)

PLESHCHITSER, A.Ya., professor, doktor meditsinskikh nauk (Gor'kiy).

Electrocardiographic registration in bipolar thoracic leads in certain pathologic conditions. Terap. arkh. 25 no.5:47-54 S-O '53. (MLRA 7:1)

(Electrocardiography)

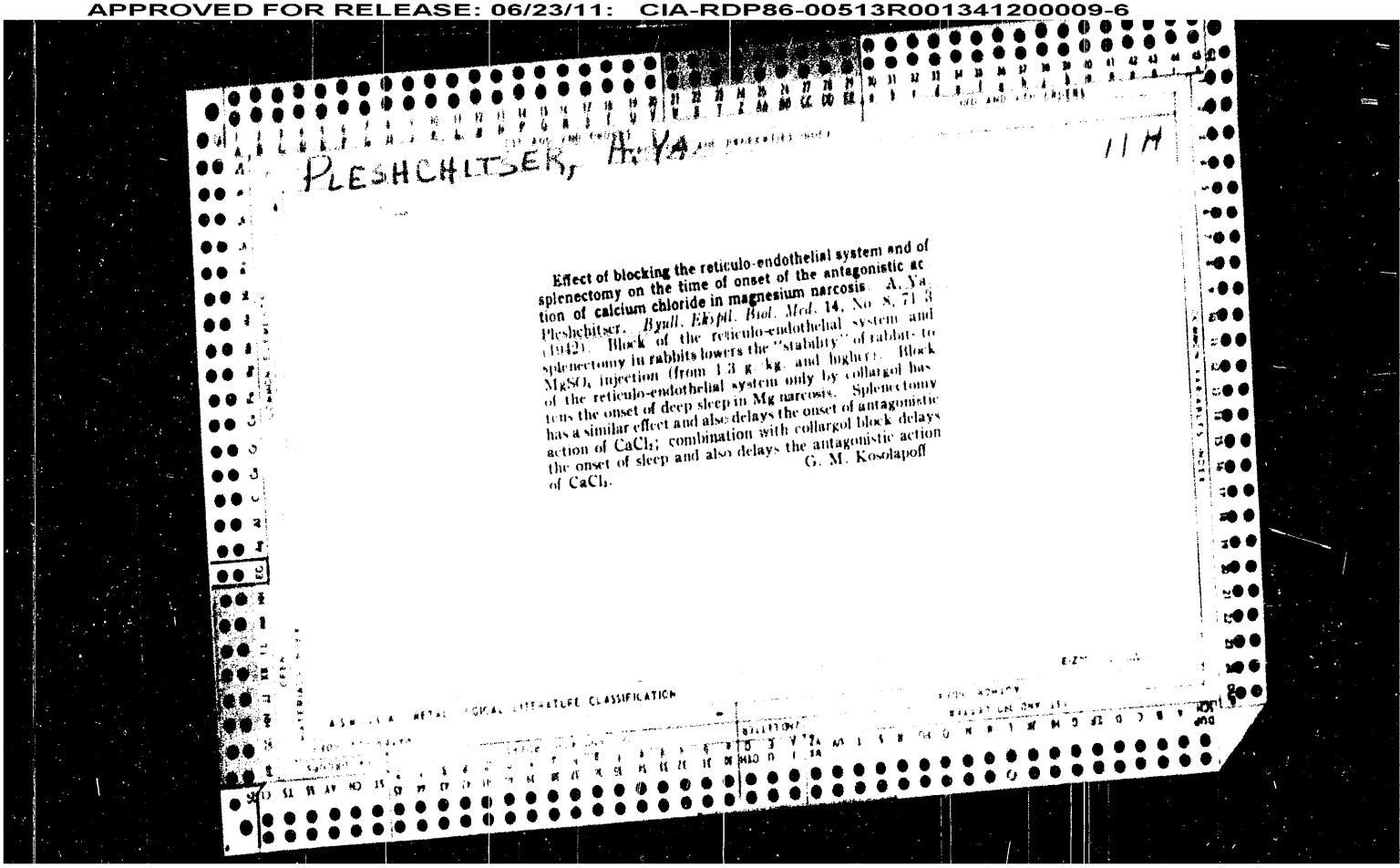
PLESHCHITSER, A. Ya.

Diffuse-fibrotic forms of silicosis. Gig sanit., Moskva no.5:31-33 May 1952. (CIML 22:3)

PLESHCHITSER, A. Ya.; GOLUBITSKAYA, N. N.

Modification of blood viscosity in vitamin C deficiency and in certain other states. Klin. med., Moskva 29 no.8:82 Aug 1951. (CLML 20:11)

1. Prof. Pleshchitser.

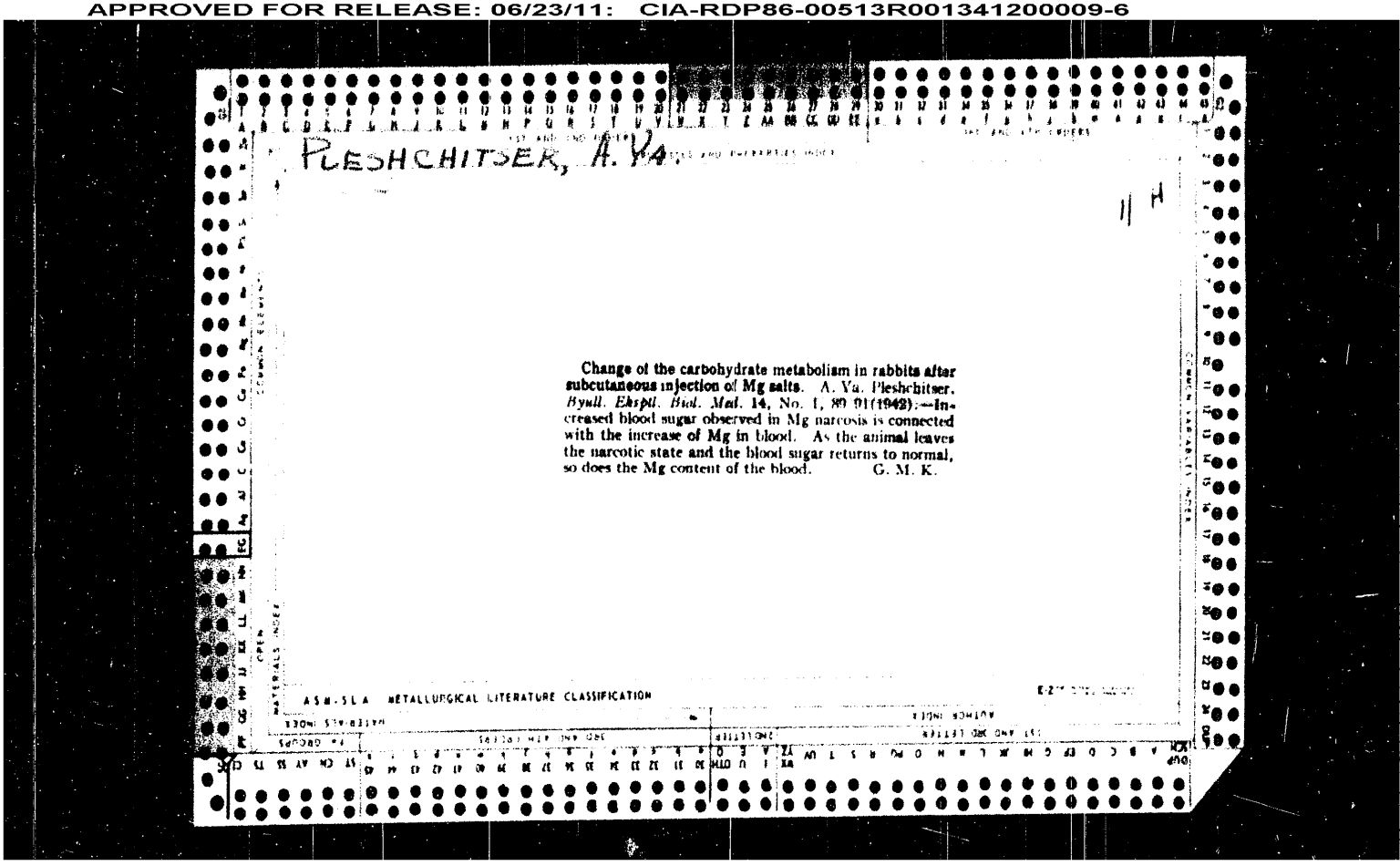


PLESHCHITSER, A. Ya.

11 H

Effect of blocking the reticulo-endothelial system and of splenectomy on the time of onset of the antagonistic action of calcium chloride in magnesium narcosis. A. Ya. Pleshchitser. *Byull. Eksptl. Biol. Med.* 14, No. 8, 71-3 (1942). Block of the reticulo-endothelial system and splenectomy in rabbits lowers the "stability" of rabbits to $MgSO_4$ injection (from 1.3 g./kg. and higher). Block of the reticulo-endothelial system only by collargol hastens the onset of deep sleep in Mg narcosis. Splenectomy has a similar effect and also delays the onset of antagonistic action of $CaCl_2$; combination with collargol block delays the onset of sleep and also delays the antagonistic action of $CaCl_2$.

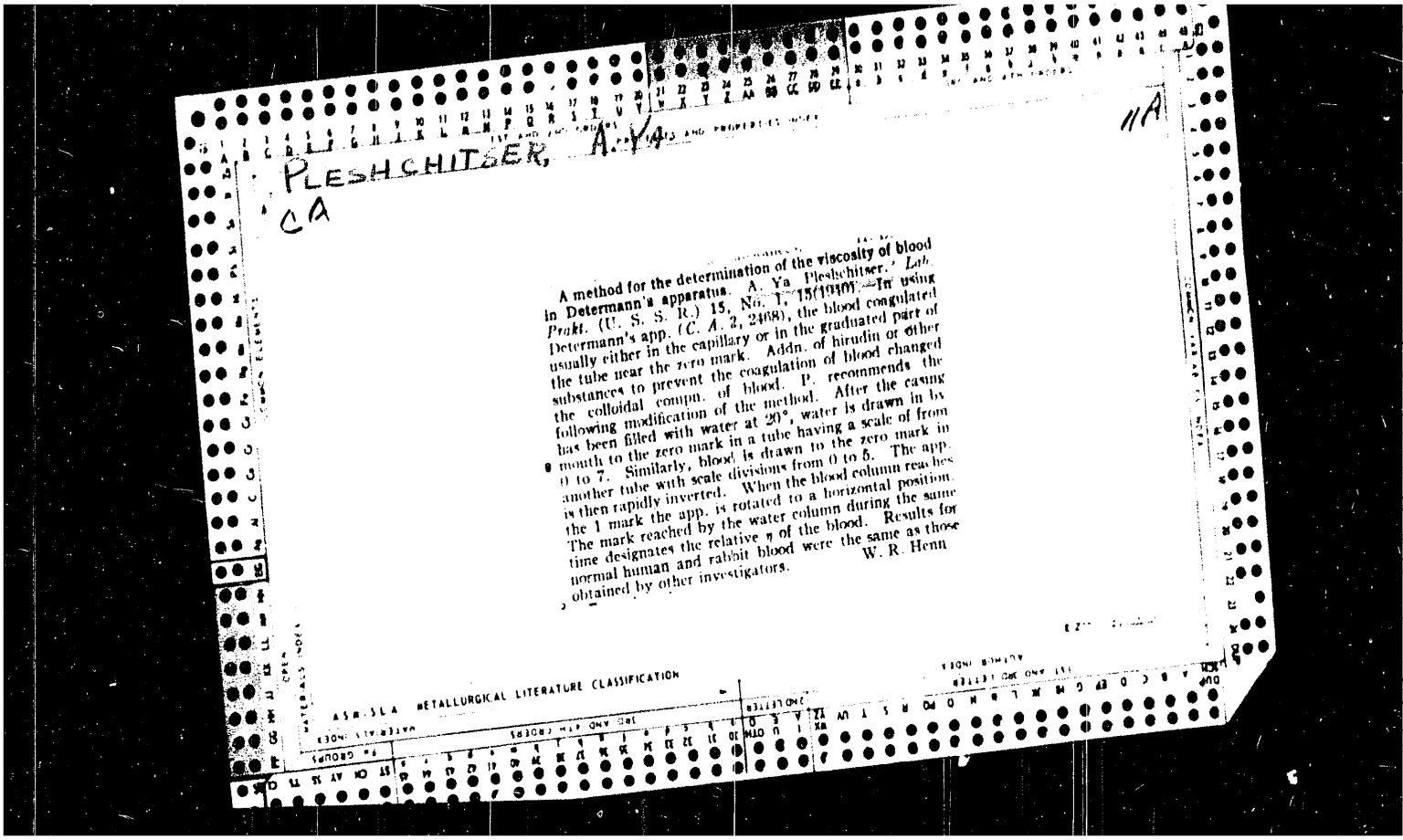
G. M. Kosolapoff



PLESHCHITSER, A. Ya.

Change of the carbohydrate metabolism in rabbits after subcutaneous injection of Mg salts. A. Ya. Pleshchitser. *Byull. Eksptl. Biol. Med.* 14, No. 1, 89-91(1942).—Increased blood sugar observed in Mg narcosis is connected with the increase of Mg in blood. As the animal leaves the narcotic state and the blood sugar returns to normal, so does the Mg content of the blood. G. M. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

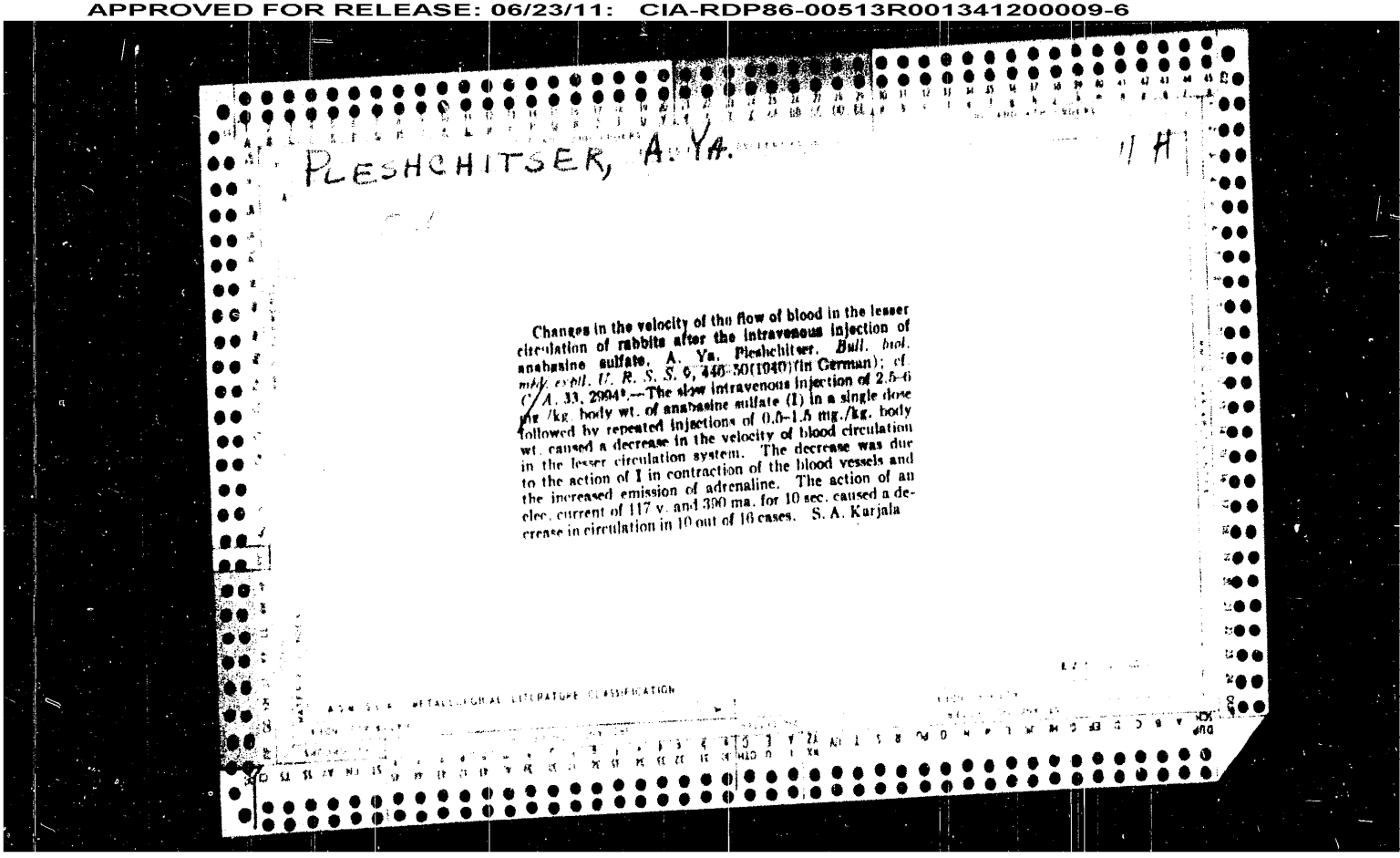


PLESHCHITSER, A. Ya
CA

11A

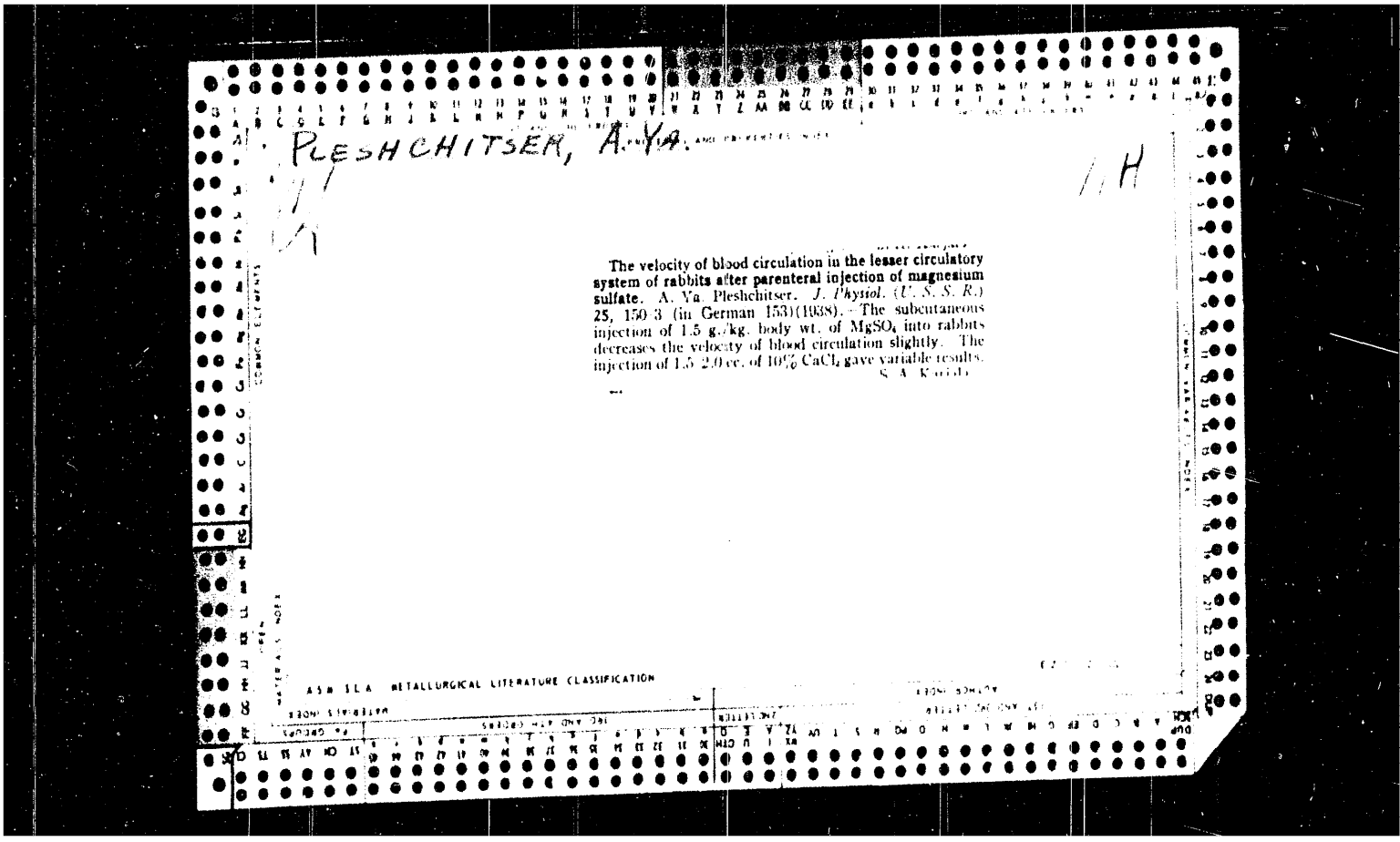
A method for the determination of the viscosity of blood in Determann's apparatus. A. Ya Pleshchitser. *Lab. Prakt.* (U. S. S. R.) **15**, No. 1, 15(1940).—In using Determann's app. (*C. A.* **2**, 2488), the blood coagulated usually either in the capillary or in the graduated part of the tube near the zero mark. Addn. of hirudin or other substances to prevent the coagulation of blood changed the colloidal compn. of blood. P. recommends the following modification of the method. After the casing has been filled with water at 20°, water is drawn in by mouth to the zero mark in a tube having a scale of from 0 to 7. Similarly, blood is drawn to the zero mark in another tube with scale divisions from 0 to 5. The app. is then rapidly inverted. When the blood column reaches the 1 mark the app. is rotated to a horizontal position. The mark reached by the water column during the same time designates the relative η of the blood. Results for normal human and rabbit blood were the same as those obtained by other investigators.

W. R. Henn



PLESHCHITSER, A. YA.

Changes in the velocity of the flow of blood in the lesser circulation of rabbits after the intravenous injection of anabasine sulfate. A. Ya. Pleshchitser. *Bull. biol. med. exptl. U. R. S. S.* 9, 446–50(1940)(in German); cf. *C. A.* 33, 2994⁹.—The slow intravenous injection of 2.5–6 mg./kg. body wt. of anabasine sulfate (I) in a single dose followed by repeated injections of 0.5–1.5 mg./kg. body wt. caused a decrease in the velocity of blood circulation in the lesser circulation system. The decrease was due to the action of I in contraction of the blood vessels and the increased emission of adrenaline. The action of an elec. current of 117 v. and 390 ma. for 10 sec. caused a decrease in circulation in 10 out of 16 cases. S. A. Karjala



PLESHCHITSER, A. Ya.

The velocity of blood circulation in the lesser circulatory system of rabbits after parenteral injection of magnesium sulfate. A. Ya. Pleshchitser. *J. Physiol. (U. S. S. R.)* 25, 150-3 (in German 153)(1938).—The subcutaneous injection of 1.5 g./kg. body wt. of $MgSO_4$ into rabbits decreases the velocity of blood circulation slightly. The injection of 1.5–2.0 cc. of 10% $CaCl_2$ gave variable results.
S. A. Kordis

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

PLESHCHITSER, A. YA.

CA

The antitoxic effect of sucrose and other sugars on experimental strychnine poisoning. A. Ya. Pleshchitser. [illegible] (in German) [illegible] 1937). *J. Physiol. U. S. S. R.* **23**, [illegible] [illegible] g./kg. wt. sucrose in isotonic soln. in doses of [illegible] mg./kg. of strych- [illegible] shows an antitoxic effect when [illegible] is injected into the liver. It has no effect [illegible] nitrate [illegible] is injected into the extremities, although [illegible] when [illegible] is injected into the extremities, although [illegible] tonic solns. of fructose are effective in these cases when the dose of sugar is [illegible] g./kg. S. A. Karjala

PLESHCHITSER, A. Ya

M.D. Ch. Res. Lab. Occupational Diseases,

People's Commissariat Public Health, Tartar

ASSR, -1939-42-

Mbr., Chair Labour Hygiene, Kazan Med. Inst., -1942-.

"On the Action of Magnesium Salts upon the Cardiovascular System," Farmakol. i Toksikol., 2, No. 2, 1939;

"Changes in the Carbohydrate Metabolism upon Subcutaneous Injection of Mg Salts to Rabbits," ibid., 4, No. 2, 1941;

"The Effect of Block of the Reticul-Endothelial System

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15-57-10-15051

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10, p 288 (USSR)

AUTHORS: Bulygin, V. Ya., Pleshchinskiy, B. I.

TITLE: Model Demonstration of Oil Explusion by Laterally Applied Water (Modelirovaniye vytesneniya krayevoy vodoy nefti)

PERIODICAL: Uch. zap. Kazansk. un-ta, 1956, Vol 115, Nr 5, pp 41-44

ABSTRACT: Bibliographic entry

Card 1/1

SOV/124-57-5-5812

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 111 (USSR)

AUTHORS: Bulygin, V. Ya., Pleshchinskiy, B. I.

TITLE: Analog Simulation of Oil Displacement by Edge Water (Modelirovaniye vytesneniya krayevoy vodoy nefti)

PERIODICAL: Uch. zap. Kazansk. un-ta, 1956, Vol 116, Nr 5, pp 41-44

ABSTRACT: A concise description is given of the experiments performed in a slot-shaped test-trough simulation of the motion of the interface boundary between two liquids. The experimental conditions required for the analogy were simulated so as to correspond to the full-scale conditions. The porous medium was represented by crushed glass. The inner region bounded by a wire-mesh separator was permeated by a mixture of kerosene and α-monobromnaphthalene, the outer region was filled with colored water. The experiment was photographically recorded. Photographs for the working of one well and of two wells are included. Bibliography: 10 references.

A. P. Shkirich

Card 1/1

A Photoelasticity Method for the Investigation of Slopes and Drains

distances from the edge of the drain. The above-mentioned investigations made it possible for the authors to recommend optimum parameters for canals and drains to avoid the danger of a collapse of their edges during excavation by machines equipped with caterpillar treads. Bibliography: 19 references.

B. M. Zuyev

SOV/24-57-4-4780

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 130 (USSR)

AUTHORS: Grigor'yev, A.M., Bulygin, V. Ya., Pleshchinskiy, B. I.

TITLE: A Photoelasticity Method for the Investigation of Slopes and Drains (K issledovaniyu otkosov i dren metodom fotouprugosti)

PERIODICAL: Tr. Kazansk. khim.-tekhnol. in-ta, 1955, Nr 19-20, pp 145-154

ABSTRACT: The paper adduces data on the influence of the geometrical parameters of slopes and the depths of drains on the character of the stress distribution therein. The investigations were made by the photoelastic method. The models for the investigations were prepared from photoelastic materials of the IM-44 type. Embankment slopes of canals 1000 mm deep were model-tested with a variation in the angle of the slope from 30° to 90° in increments of 5°. Relationships of the bearing capacity of the canal in terms of the change of its depth with a constant slope angle $\phi = 45°$ were obtained. Rectangular-section drains, having parameters that varied with height, were also investigated. The model of a circular widening 300 mm in diameter was simulated at the bottom of the drain. The load was applied in the form of the distributed pressure of a caterpillar model at various

Card 1/2

KIRYUKHIN, L.G.; PLESHCHEYEV, I.S.

Tectonics and the prospects for finding gas and oil in the Mynsualmas group of structures in the Northern Ustyurt. Geol. nefti i gaza 8 no.5:17-21 My '64. (MIRA 17:9)

1. Aerogeologicheskaya ekspeditsiya No.11 Vsesoyuznogo aerogeologicheskogo tresta Ministerstva geologii i okhrany nedr SSSR.

KLEYNER, Yu. M.; PLESHCHEYEV, I.S.

Origin of the sandy massifs of northern Ustyurt. Izv. AN SSSR. Ser. geog. no. 2:96-101 Mr-Ap '64. (MIRA 17:5)

1. Vsesoyuznyy aerogeologicheskiy trest.

GARETSKIY, R.G.; PLESHCHEYEV, I.S.

Paleogene sediments of Ustyurt. Biul. MOIP. Otd. geol. 39 no.1: 109-124 Ja-F '64. (MIRA 18:4)